UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,721	07/25/2007	Manfred Hartmann	741438-70	9396
78198 Studebaker & B	7590 06/27/200 Brackett PC	EXAMINER		
1890 Preston W		SANTIAGO, MARICELI		
Suite 105 Reston, VA 20191			ART UNIT	PAPER NUMBER
,			2879	
			MAIL DATE	DELIVERY MODE
			06/27/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Comments	10/594,721	HARTMANN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Mariceli Santiago	2879				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 29 Se	eptember 2006.					
	action is non-final.					
<i>,</i> —	/ <del></del>					
•	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
	pa Quay.o, 1000 0.21, 10					
Disposition of Claims						
4)⊠ Claim(s) <u>1-15</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-15</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement					
O) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>29 September 2006</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents	s have been received.					
2.☐ Certified copies of the priority documents		on No.				
	3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage					
	application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date  Notice of Information Disclosure Statement(s) (PTO/SB/08)  Notice of Informal Patent Application						
(a) Information Disclosure Statement(s) (PTO/SB/08) 5) ☐ Notice of Informal Patent Application Paper No(s)/Mail Date <u>1/9/2007</u> . 6) ☐ Other:						
. sps						

### **DETAILED ACTION**

### Response to Amendment

Receipt of the Amendment, filed on August 29, 2006, is acknowledged.

Claims 1-15 are pending in the instant application.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5-9, 12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Hanahara et al. (US 6,611,097).

Regarding claim 1, Hanahara discloses a multicolor electroluminescent element (Fig. 3), comprising a substrate (21), which is at least partially transparent over at least part of its area, having a front side and a rear side, a first electrode layer (22) situated on the rear side of the substrate (21), a first electroluminescent layer (3), having electroluminophores (Column 4, lines 14-19) incorporated therein, situated on a side of the first electrode layer (22) facing away from the substrate (21), a second electrode layer (14) situated on a side of the first electrode layer (22A) situated on the front side of the substrate (21), a second electroluminescent layer (3A), having electroluminophores (Column 4, lines 14-19) incorporated therein, situated on a side of the third electrode layer (22A) facing away from the substrate (21), a fourth electrode layer (14A) situated on a side of the second electroluminescent layer (3A) facing away from the substrate (21).

Page 3

Regarding claim 5, the claim is directed to the method of depositing the first or third electrodes, in view of an absent of a showing that the method imparts distinctive structural characteristics to the final product, the limitations directed to the method of manufacturing are not germane to the issue of patentability of the device.

Regarding claim 6, Hanahara discloses a multicolor electroluminescent element wherein at least one of the first and third electrode layer at least predominantly comprises indium-tin oxide (Column 4, lines 9-13).

Regarding claim 7, Hanahara discloses a multicolor electroluminescent element comprising an insulating layer (15A), which is transparent over at least a part of its area, situated on the a side of the fourth electrode layer facing away from the substrate (Column 4, lines 23-24).

Regarding claim 8, Hanahara discloses a multicolor electroluminescent element comprising an insulating layer (15) situated on the a side of the second electrode layer facing away from the substrate (Column 4, lines 23-24).

Regarding claim 9, Hanahara discloses a multicolor electroluminescent element wherein the substrate (21) at least predominantly consists of polyethylene terephthalate (Column 4, lines 6-7).

Regarding claim 12, Hanahara discloses a multicolor electroluminescent element wherein the electroluminophores incorporated in the first electroluminescent layer have a different emission color than the electroluminophores incorporated in the second electroluminescent layer (Column 4, lines 42-46).

Regarding claim 13, the claim is directed to the method of depositing the first or third electrodes, in view of an absent of a showing that the method imparts distinctive structural

Art Unit: 2879

characteristics to the final product, the limitations directed to the method of manufacturing are not germane to the issue of patentability of the device.

Page 4

Regarding claim 14, Hanahara discloses a multicolor electroluminescent element which has at least one color-converting layer (17).

Claims 1, 5-8, 10, 11 and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Suntola et al. (US 4,396,864).

Regarding claim 1, Suntola discloses a multicolor electroluminescent element (Fig. 2), comprising a substrate (1, 5), which is at least partially transparent over at least part of its area, having a front side and a rear side, a first electrode layer (2) situated on the rear side of the substrate (1, 5), a first electroluminescent layer (3), having electroluminophores (Column 2, lines 31-35) incorporated therein, situated on a side of the first electrode layer (12) facing away from the substrate (1, 5), a second electrode layer (4) situated on a side of the first electrode layer (12) situated on the front side of the substrate (1, 5), a second electroluminescent layer (13), having electroluminophores (Column 2, lines 31-35) incorporated therein, situated on a side of the third electrode layer (12) facing away from the substrate (1, 5), a fourth electrode layer (14) situated on a side of the second electroluminescent layer (13) facing away from the substrate (1, 5).

Regarding claim 5, the claim is directed to the method of depositing the first or third electrodes, in view of an absent of a showing that the method imparts distinctive structural characteristics to the final product, the limitations directed to the method of manufacturing are not germane to the issue of patentability of the device.

Regarding claim 6, Suntola discloses a multicolor electroluminescent element wherein at least one of the first and third electrode layer at least predominantly comprises indium-tin oxide (Column 2, lines 33-35).

Regarding claim 7, Suntola discloses a multicolor electroluminescent element comprising an insulating layer (17), which is transparent over at least a part of its area, situated on the a side of the fourth electrode layer facing away from the substrate (Column 3, lines 1-3).

Regarding claim 8, Suntola discloses a multicolor electroluminescent element comprising an insulating layer (7) situated on the a side of the second electrode layer facing away from the substrate (Column 3, lines 1-3).

Regarding claim 10, Suntola discloses a multicolor electroluminescent element which has at least one color-filtering layer (Column 2, lines 54-62).

Regarding claim 11, Suntola discloses a multicolor electroluminescent element wherein the substrate (1, 5) has color-filtering (Column 2, lines 49-53).

Regarding claim 13, the claim is directed to the method of depositing the first or third electrodes, in view of an absent of a showing that the method imparts distinctive structural characteristics to the final product, the limitations directed to the method of manufacturing are not germane to the issue of patentability of the device.

Regarding claim 14, Suntola discloses a multicolor electroluminescent element which has at least one color-converting layer (Column 2, lines 54-62).

Regarding claim 15, Suntola discloses a multicolor electroluminescent element wherein the substrate (1, 5) has color-converting (Column 2, lines 49-53).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanahara et al. (US 6,611,097) in view of Mori et al. (US 2005/0127824).

Regarding claims 2-4, Hanahara fails to exemplify at least one of the electrode layers being a transparent conductive lacquer layer of electrically conductive polymer. However, in the same field of endeavor, Mori discloses an electroluminescent display wherein the transparent electrodes are made of a transparent conductive lacquer, such as, doped polythiophene (¶ [0039]). It is considered within the capabilities of one skilled in the art the selection of a material based on its known suitability for an intended application as an obvious matter of design engineering. Thus, it would have been obvious to one having ordinary skills in the art at the time the invention was made to use the transparent electrode material disclosed by Mori in the device of Hanahara, since the selection of known materials for a known purpose is within the skill of the art.

#### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariceli Santiago whose telephone number is (571) 272-2464. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

Application/Control Number: 10/594,721 Page 7

Art Unit: 2879

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Mariceli Santiago/ Primary Examiner, Art Unit 2879